

NWHC Lower 48 states & HI protocol for the collection, storage, and shipment of cloacal swab samples (v.08/10/06). NWHC contact: Richard Zane (608-270-2481); rzane@usgs.gov

Background information

Virus transport media is prepared at NWHC and 1.5cc is dispensed into 2.0cc cryovials pre-labeled with NWHC case and accession numbers. Cryovials are shipped on dry ice and can be stored at standard freezer temp (-20C) for the duration of the field season. Once thawed, virus transport media is good for 7 days refrigerated at 4C. Unused media vials also may be refrozen once if needed. As samples are collected, vials can be kept on ice or blue ice packs during the day's work (use plenty of blue ice packs and keep the vials under them in the cooler), but should be transferred to ultra-low freezer (-80C) or liquid nitrogen vapor shipper for storage. An alternative is to keep samples refrigerated and ship to NWHC on blue ice packs if they will arrive in Madison within 72 hours of collection. Samples should not be stored at standard freezer temperature (-20C). Note any exceptions to ultra-cold storage on packing list and when entering field data.

Cloacal swab procedure

1. Thaw appropriate number of vials of media at refrigerator temperature (4 °C) or on ice and keep chilled with wet/blue ice packs in a cooler during the day of collection.
2. Unwrap a Dacron swab from the stem-end of the packaging (store swabs so they do not get wet), remove swab and insert the entire head of the swab into the cloaca. Use gentle pressure and in a circular motion, swab the inside circumference of the cloaca two or three times.
3. Shake off large pieces of feces before inserting the swab into the vial. With the swab in the media, rotate the stem of the swab between fingers vigorously. Lift the swab about ¼" from the bottom of the vial and bend the stem over the edge of the vial to break off the stem (plastic stems) or cut the stem with scissors (metal stems) so that the swab remains in the vial and the end does not extend above the vial so the cap can be screwed tight. The entire swab end and a portion of the stem will be left in the vial. Wipe scissors with alcohol each time they are used to cut a stem.
4. Write 4-letter species code on vial with fine-tip Sharpie. Keep samples on ice or ice packs and out of direct sunlight in cooler during the day.
Transfer tubes to -80C freezer or nitrogen dry shipper for storage.



Shipping to NWHC

Ship samples as "Diagnostic Specimens" (check current regulations) on dry ice (preferred) or, if unfrozen, on blue ice packs (equal volume of ice packs and samples) via overnight courier (FEDEX preferred). Unfrozen vials need to be RECEIVED at NWHC within 72 hours of sample collection. Vials should be ordered sequentially by NWHC case and accession number in chipboard cryovial boxes, which should be double bagged in leak-proof plastic bags with absorbent material. Label cryovial box with NWHC case number, contact name, and species. Prevent dry ice or blue ice packs from damaging leak-proof plastic bags by wrapping in bubble-wrap or paper towels. Use freezer shipping containers (styrofoam cooler within cardboard box) as outer packaging. Tape packing list (below) to top of styrofoam cooler, so it is visible when cardboard box is opened. Label outside of container "Diagnostic Specimens (Wildlife)." If dry ice is used (at least 10 pounds recommended), apply IATA label and declare dry ice on air bill. Do not use dry ice in hard plastic coolers. Vapor shippers can be used for sample transport ("Not restricted – dry shipper" and "IATA A800" on air bill). See:

Shipment of Diagnostic Specimens:

<http://depts.washington.edu/labweb/PatientCare/Clinical/Appendix/appk.pdf>

<http://www.cvm.uiuc.edu/vdl/CourierService.htm>

Information on transport of dry shippers:

http://www.zoo.ufl.edu/julian/dry_shipper/TipsDryShipper.pdf

Ship package by overnight express (FEDEX preferred; Mon-Wed, unless other prearrangement) to:

Richard Zane

National Wildlife Health Center

6006 Schroeder Road

Madison, WI 53711

Phone 608-270-2481

rzane@usgs.gov

Note: Please notify NWHC of shipments through the web-based system found at <http://wildlifedisease.nbii.gov/ai>. Only authorized personnel have access: see your data administrator.

National Wildlife Health Center AI Sample Packing List

Sender's information

Name, affiliation:

Date sent:

Phone:

email:

NWHC case #:

Species:

Number of vials:

Location:

Shipped on: dry ice_____ vapor shipper_____ blue ice_____

NWHC use

Received by:

Date:

Logged in by:

Date:

Field data to send to NWHC:

Use the National HPAI Early Detection System through the Wildlife Disease Information Node

Visit <http://wildlifedisease.nbii.gov/ai/> and download Excel Worksheet in the left column

Cross reference band or field number with NWHC case and accession number. List the samples sequentially by NWHC case number (5 digits), and accession number (3 digits)

Use WGS84 datum for locations, recording in decimal degrees (e.g. 45.23297, -165.23920)

Email completed Excel Worksheet to Richard Zane (rzane@usgs.gov) before samples are shipped

When samples are shipped, notify NWHC through the web-based system at <http://wildlifedisease.nbii.gov/ai/> see your data administrator for access